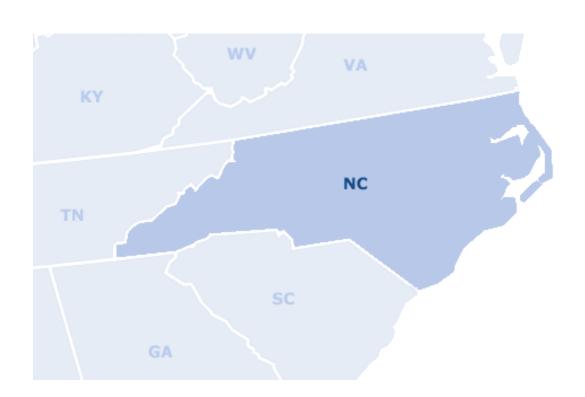
The Burden of Chronic Disease and Injury in North Carolina

Diabetes

Ruth Petersen, MD, MPH, Chief, Chronic Disease and Injury Section North Carolina Division of Public Health





Three Major Forms of Diabetes

Diabetes is a group of diseases characterized by high levels of blood glucose (blood sugar).

Type 1 Diabetes (Juvenile diabetes)

Generally occurs in children and young people under the age of 30

Highest prevalence among non-Hispanic whites

Controlled with insulin injections

5% to 10% of all diabetes cases

Type 2 Diabetes (Adult-onset diabetes)

Generally occurs after the age of 30; increasingly seen among youth now

Highest prevalence among African Americans

Controlled with diet, exercise and pills

90% to 95% of all diabetes cases

Gestational Diabetes

Occurs in some pregnant women who never had diabetes before

Highest prevalence among ethnic minority women

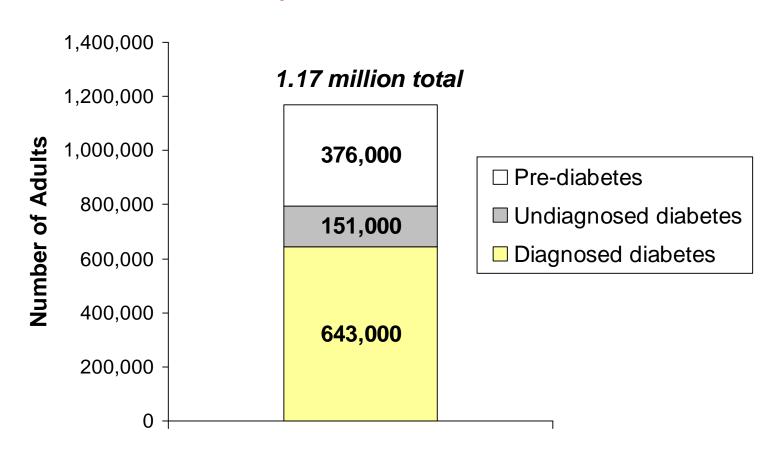
Controlled with diet, exercise and insulin

3% to 9% of all pregnant women

Source: 2007 National Diabetes Fact Sheet. Centers for Disease Control and Prevention, Atlanta, GA: U.S. Department of Health and Human Services.

Estimated Number of Adults with Chronic High Blood Glucose Levels in North Carolina 2008*

North Carolina was ranked 17th highest in adult diagnosed diabetes prevalence in the U.S. in 2008.



^{*} All numbers rounded to the nearest one thousand

In North Carolina, **Diabetes** affects minority and low-income groups the most

Demographic Characteristic and Prevalence Rate for N.C. Adults

Race and Ethnicity*			
White	8.4%		
African American	15.6%		
Native American	12.4%		
Hispanic	4.5%		

Education			
Less than H.S.	13.6%		
H.S. or G.E.D.	10.3%		
Some College	9.2%		
College Graduate	6.3%		

Household Income		
<\$15,000	16.7%	
\$15,000-24,999	11.5%	
\$25,000-34,999	10.5%	
\$35,000-49,999	9.5%	
\$50,000-74,999	6.3%	
\$75,000+	5.4%	

Diabetes Prevalence for Total Adult Population (18+): 9.3%

Source: Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention [2008].

^{*} Race and ethnicity categories are not mutually exclusive.

Diabetes-Related Hospital Discharges in North Carolina, 2007

The cost of diabetes-related hospitalizations is a *huge* burden on the state

Diagnosis Related to Diabetes	Total Discharges	Total Charges	Average Charge per Hospital Stay
Any mention of diabetes in diagnosis	194,493	\$4,046,926,159	\$20,808
Cardiovascular Disease ¹	35,628	\$1,008,711,287	\$28,312
Diabetes as principal diagnosis	16,946	\$279,359,049	\$16,485
Renal Dialysis/Transplant ²	8,959	\$238,693,100	\$26,643
Stroke ³	8,227	\$161,445,995	\$19,624
Lower Limb Amputation ⁴	2,608	\$94,952,645	\$36,408

Source: Provisional 2007 North Carolina Hospital discharges data, State Center for Health Statistics

N.C. Diabetes Prevention and Control Branch Chronic Disease and Injury Section

At a Glance:

- 9.25 FTE's
- \$750,000–\$800,000 in federal funding



Branch Activities/Accomplishments:

- Increased self-management education programs available through local health departments tenfold (4 in 2006 to approximately 40 in 2010)
- Received the 2010 American Public Health Association's Innovation Award
- Implemented S.L. 2002-103 (SB911) and S.L. 2009-563 (SB738)
- Funded local health departments and community organizations

Questions?





Ruth Petersen, MD, MPH

Chief, Chronic Disease and Injury Section NC Division of Public Health

Ruth.Petersen@dhhs.nc.gov / (919) 707-5203